

# Surfside Condo Collapse

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# Known Facts

- June 24, 2021
- Surfside, Florida
- 12 stories
  - 130 units
  - 139.5 ft
- 98 people dead
  - 11 injured
- \$1 billion in damage



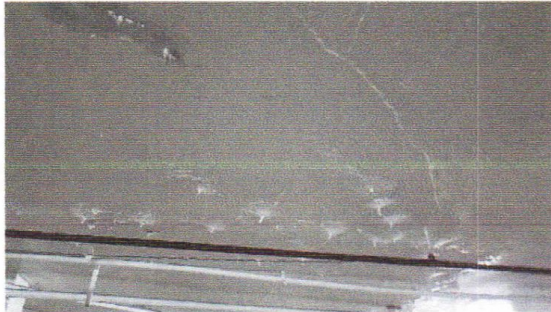
# What Happened?

- There was not the important layer of waterproofing; this eroded the concrete and steel rebar.
- Engineer did report problem previously.
- Was made with cost-saving materials that was able to get away with 40 years ago.
  - Less steel reinforcements
- 2 mm of the foundation sunk in the ground per year in the 90s.



# What Happened?

- 272 sand trucks per day caused deterioration in the concrete floor
- Plumbing and sewer system in the town in 1970s needed to be updated for new projects to be approved
- Frequent flooding in garage





# Ethical Issues

- Motivation to save time and money prioritized monetization over the safety of hundreds of people
- Serious miscommunication between the corporations and the residents led to the difference between saving lives and mass homicide
- Engineers submitted reports that were not acted upon for years to come

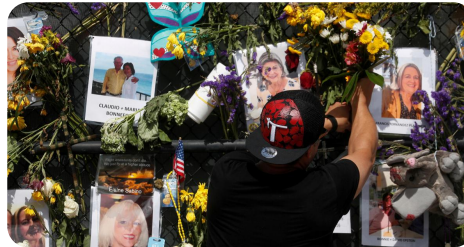
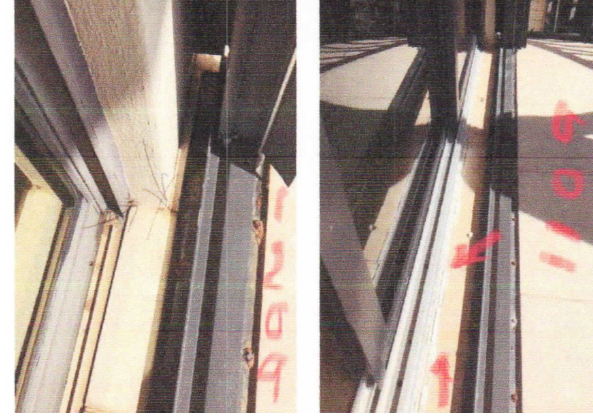
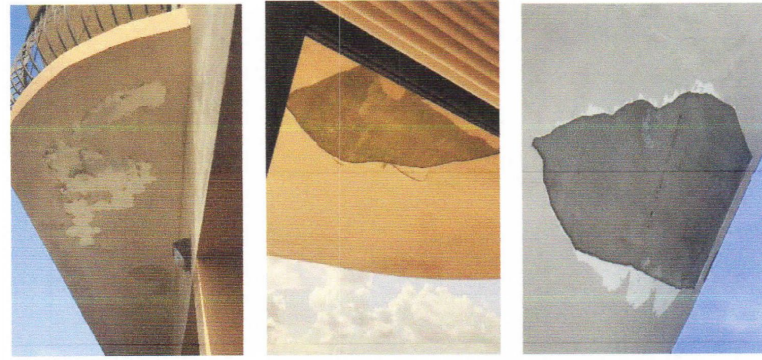


Image taken in 2018



# Investigation

- Understanding how the building was built and repaired
- Taking materials and soil samples
- Piece by piece investigating



# Conclusion

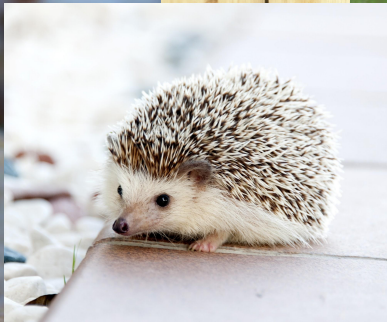


- **What effects has the condo collapse had?**
  - New concerns about building inspection.
  - Miami ordered an inspection of old buildings.
  - Miami real estate is expected to shift to favor new buildings.
- **If the problem had been solved, how would the outcome be different?**
  - In an ideal world, the engineers would have been listened to.
  - The condo would have undergone the rebuilding process.





The End





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